

PCT

REQUEST

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.

For receiving Office use only

International Application No.

International Filing Date

Name of receiving Office and "PCT International Application"

Applicant's or agent's file reference  
(if desired) (12 characters maximum) 6/WW32609WO

Box No. I TITLE OF INVENTION

FIRE AND EXPLOSION SUPPRESSION

Box No. II APPLICANT

☐ This person is also inventor

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

KIDDE PLC  
Mathisen Way  
Colnbrook, Slough,  
Berkshire, SL3 OHB  
ENGLAND

Telephone No.

Facsimile No.

Teleprinter No.

Applicant's registration No. with the Office

State (that is, country) of nationality:

GB

State (that is, country) of residence:

GB

This person is applicant  
for the purposes of:

☐ all designated  
States

☒ all designated States except  
the United States of America

☐ the United States  
of America only

☐ the States indicated in  
the Supplemental Box

Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

DUNSTER, Robert George  
34 Royston Way  
Burnham, Slough  
Buckinghamshire, SL1 6ER  
ENGLAND

This person is:

☐ applicant only

☒ applicant and inventor

☐ inventor only (If this check-box  
is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:

GB

State (that is, country) of residence:

GB

This person is applicant  
for the purposes of:

☐ all designated  
States

☐ all designated States except  
the United States of America

☒ the United States  
of America only

☐ the States indicated in  
the Supplemental Box

☒ Further applicants and/or (further) inventors are indicated on a continuation sheet.

Box No. IV AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE

The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as:

☒ agent

☐ common  
representative

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)

MATHISEN & MACARA  
The Coach House  
6-8 Swakeleys Road  
Ickenham, Uxbridge, UB10 8BZ  
United Kingdom

Telephone No.

+44(0) 1895 678331

Facsimile No.

+44(0) 1895 621849

Teleprinter No.

Agent's registration No. with the Office

☐ Address for correspondence: Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.

## Continuation of Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)

If none of the following sub-boxes is used, this sheet should not be included in the request.

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

DAVIES Simon James  
2 Silverdale Court  
Leacroft, Staines  
Middlesex, TW18 4NT  
ENGLAND

This person is:

- ☐ applicant only  
☒ applicant and inventor  
☐ inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:  
GB

State (that is, country) of residence:  
GB

This person is applicant for the purposes of:

- ☐ all designated States ☐ all designated States except the United States of America ☒ the United States of America only ☐ the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

LADE Robert James  
4 City Gate  
95-107 Southampton Street  
Reading, Berkshire, RG1 2QW  
ENGLAND

This person is:

- ☐ applicant only  
☒ applicant and inventor  
☐ inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:  
GB

State (that is, country) of residence:  
GB

This person is applicant for the purposes of:

- ☐ all designated States ☐ all designated States except the United States of America ☒ the United States of America only ☐ the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

This person is:

- ☐ applicant only  
☐ applicant and inventor  
☐ inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:

State (that is, country) of residence:

This person is applicant for the purposes of:

- ☐ all designated States ☐ all designated States except the United States of America ☐ the United States of America only ☐ the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

This person is:

- ☐ applicant only  
☐ applicant and inventor  
☐ inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:

State (that is, country) of residence:

This person is applicant for the purposes of:

- ☐ all designated States ☐ all designated States except the United States of America ☐ the United States of America only ☐ the States indicated in the Supplemental Box

☐ Further applicants and/or (further) inventors are indicated on another continuation sheet.

**Box No. V DESIGNATION OF STATES***Mark the applicable check-boxes below; at least one must be marked.*

The following designations are hereby made under Rule 4.9(a):

**Regional Patent**

- ☒ **AP ARIPO Patent:** GH Ghana, GM Gambia, KE Kenya, LS Lesotho, MW Malawi, MZ Mozambique, SD Sudan, SL Sierra Leone, SZ Swaziland, TZ United Republic of Tanzania, UG Uganda, ZM Zambia, ZW Zimbabwe, and any other State which is a Contracting State of the Harare Protocol and of the PCT (*if other kind of protection or treatment desired, specify on dotted line*) .....
- ☒ **EA Eurasian Patent:** AM Armenia, AZ Azerbaijan, BY Belarus, KG Kyrgyzstan, KZ Kazakhstan, MD Republic of Moldova, RU Russian Federation, TJ Tajikistan, TM Turkmenistan, and any other State which is a Contracting State of the Eurasian Patent Convention and of the PCT
- ☒ **EP European Patent:** AT Austria, BE Belgium, BG Bulgaria, CH & LI Switzerland and Liechtenstein, CY Cyprus, CZ Czech Republic, DE Germany, DK Denmark, EE Estonia, ES Spain, FI Finland, FR France, GB United Kingdom, GR Greece, IE Ireland, IT Italy, LU Luxembourg, MC Monaco, NL Netherlands, PT Portugal, SE Sweden, SI Slovenia, SK Slovakia, TR Turkey, and any other State which is a Contracting State of the European Patent Convention and of the PCT
- ☒ **OA OAPI Patent:** BF Burkina Faso, BJ Benin, CF Central African Republic, CG Congo, CI Côte d'Ivoire, CM Cameroon, GA Gabon, GN Guinea, GQ Equatorial Guinea, GW Guinea-Bissau, ML Mali, MR Mauritania, NE Niger, SN Senegal, TD Chad, TG Togo, and any other State which is a member State of OAPI and a Contracting State of the PCT (*if other kind of protection or treatment desired, specify on dotted line*) .....

**National Patent** (*if other kind of protection or treatment desired, specify on dotted line*):

- |   |  |   |
|---|--|---|
| <input checked="" type="checkbox"/> AE United Arab Emirates .....               | <input checked="" type="checkbox"/> GM Gambia .....                                    | <input checked="" type="checkbox"/> NZ New Zealand .....                      |
| <input checked="" type="checkbox"/> AG Antigua and Barbuda .....                | <input checked="" type="checkbox"/> HR Croatia .....                                   | <input checked="" type="checkbox"/> OM Oman .....                             |
| <input checked="" type="checkbox"/> AL Albania .....                            | <input checked="" type="checkbox"/> HU Hungary .....                                   | <input checked="" type="checkbox"/> PH Philippines .....                      |
| <input checked="" type="checkbox"/> AM Armenia .....                            | <input checked="" type="checkbox"/> ID Indonesia .....                                 | <input checked="" type="checkbox"/> PL Poland .....                           |
| <input checked="" type="checkbox"/> AT Austria .....                            | <input checked="" type="checkbox"/> IL Israel .....                                    | <input checked="" type="checkbox"/> PT Portugal .....                         |
| <input checked="" type="checkbox"/> AU Australia .....                          | <input checked="" type="checkbox"/> IN India .....                                     | <input checked="" type="checkbox"/> RO Romania .....                          |
| <input checked="" type="checkbox"/> AZ Azerbaijan .....                         | <input checked="" type="checkbox"/> IS Iceland .....                                   | <input checked="" type="checkbox"/> RU Russian Federation .....               |
| <input checked="" type="checkbox"/> BA Bosnia and Herzegovina .....             | <input checked="" type="checkbox"/> JP Japan .....                                     |   |
| <input checked="" type="checkbox"/> BB Barbados .....                           | <input checked="" type="checkbox"/> KE Kenya .....                                     | <input checked="" type="checkbox"/> SC Seychelles .....                       |
| <input checked="" type="checkbox"/> BG Bulgaria .....                           | <input checked="" type="checkbox"/> KG Kyrgyzstan .....                                | <input checked="" type="checkbox"/> SD Sudan .....                            |
| <input checked="" type="checkbox"/> BR Brazil .....                             | <input checked="" type="checkbox"/> KP Democratic People's Republic of Korea .....     | <input checked="" type="checkbox"/> SE Sweden .....                           |
| <input checked="" type="checkbox"/> BY Belarus .....                            | <input checked="" type="checkbox"/> KR Republic of Korea .....                         | <input checked="" type="checkbox"/> SG Singapore .....                        |
| <input checked="" type="checkbox"/> BZ Belize .....                             | <input checked="" type="checkbox"/> KZ Kazakhstan .....                                | <input checked="" type="checkbox"/> SK Slovakia .....                         |
| <input checked="" type="checkbox"/> CA Canada .....                             | <input checked="" type="checkbox"/> LC Saint Lucia .....                               | <input checked="" type="checkbox"/> SL Sierra Leone .....                     |
| <input checked="" type="checkbox"/> CH & LI Switzerland and Liechtenstein ..... | <input checked="" type="checkbox"/> LK Sri Lanka .....                                 | <input checked="" type="checkbox"/> TJ Tajikistan .....                       |
| <input checked="" type="checkbox"/> CN China .....                              | <input checked="" type="checkbox"/> LR Liberia .....                                   | <input checked="" type="checkbox"/> TM Turkmenistan .....                     |
| <input checked="" type="checkbox"/> CO Colombia .....                           | <input checked="" type="checkbox"/> LS Lesotho .....                                   | <input checked="" type="checkbox"/> TN Tunisia .....                          |
| <input checked="" type="checkbox"/> CR Costa Rica .....                         | <input checked="" type="checkbox"/> LT Lithuania .....                                 | <input checked="" type="checkbox"/> TR Turkey .....                           |
| <input checked="" type="checkbox"/> CU Cuba .....                               | <input checked="" type="checkbox"/> LU Luxembourg .....                                | <input checked="" type="checkbox"/> TT Trinidad and Tobago .....              |
| <input checked="" type="checkbox"/> CZ Czech Republic .....                     | <input checked="" type="checkbox"/> LV Latvia .....                                    |   |
| <input checked="" type="checkbox"/> DE Germany .....                            | <input checked="" type="checkbox"/> MA Morocco .....                                   | <input checked="" type="checkbox"/> TZ United Republic of Tanzania .....      |
| <input checked="" type="checkbox"/> DK Denmark .....                            | <input checked="" type="checkbox"/> MD Republic of Moldova .....                       | <input checked="" type="checkbox"/> UA Ukraine .....                          |
| <input checked="" type="checkbox"/> DM Dominica .....                           | <input checked="" type="checkbox"/> MG Madagascar .....                                | <input checked="" type="checkbox"/> UG Uganda .....                           |
| <input checked="" type="checkbox"/> DZ Algeria .....                            | <input checked="" type="checkbox"/> MK The former Yugoslav Republic of Macedonia ..... | <input checked="" type="checkbox"/> US United States of America .....         |
| <input checked="" type="checkbox"/> EC Ecuador .....                            | <input checked="" type="checkbox"/> MN Mongolia .....                                  | <input checked="" type="checkbox"/> UZ Uzbekistan .....                       |
| <input checked="" type="checkbox"/> EE Estonia .....                            | <input checked="" type="checkbox"/> MW Malawi .....                                    | <input checked="" type="checkbox"/> VC Saint Vincent and the Grenadines ..... |
| <input checked="" type="checkbox"/> ES Spain .....                              | <input checked="" type="checkbox"/> MX Mexico .....                                    | <input checked="" type="checkbox"/> VN Viet Nam .....                         |
| <input checked="" type="checkbox"/> FI Finland .....                            | <input checked="" type="checkbox"/> MZ Mozambique .....                                | <input checked="" type="checkbox"/> YU Yugoslavia .....                       |
| <input checked="" type="checkbox"/> GB United Kingdom .....                     | <input checked="" type="checkbox"/> NO Norway .....                                    | <input checked="" type="checkbox"/> ZA South Africa .....                     |
| <input checked="" type="checkbox"/> GD Grenada .....                            |  | <input checked="" type="checkbox"/> ZM Zambia .....                           |
| <input checked="" type="checkbox"/> GE Georgia .....                            |  | <input checked="" type="checkbox"/> ZW Zimbabwe .....                         |
| <input checked="" type="checkbox"/> GH Ghana .....                              |  |   |

Check-boxes below reserved for designating States which have become party to the PCT after issuance of this sheet:

<input type="checkbox"/> .....	<input type="checkbox"/> .....	<input type="checkbox"/> .....
<input type="checkbox"/> .....	<input type="checkbox"/> .....	<input type="checkbox"/> .....

**Precautionary Designation Statement:** In addition to the designations made above, the applicant also makes under Rule 4.9(b) all other designations which would be permitted under the PCT except any designation(s) indicated in the Supplemental Box as being excluded from the scope of this statement. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit. (*Confirmation (including fees) must reach the receiving Office within the 15-month time limit.*)

**Box No. VI PRIORITY CLAIM**

The priority of the following earlier application(s) is hereby claimed:

Filing date of earlier application (day/month/year)	Number of earlier application	Where earlier application is:		
		national application: country or Member of WTO	regional application:* regional Office	international application: receiving Office
item (1) 28.03.02 (28th March 2002)	0207466.4	United Kingdom		
item (2)				
item (3)				
item (4)				
item (5)				

☐ Further priority claims are indicated in the Supplemental Box.

The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) (only if the earlier application was filed with the Office which for the purposes of this international application is the receiving Office) identified above as:

☐ all items   
 ☐ item (1)   
 ☐ item (2)   
 ☐ item (3)   
 ☐ item (4)   
 ☐ item (5)   
 ☐ other, see Supplemental Box

\* Where the earlier application is an ARIPO application, indicate at least one country party to the Paris Convention for the Protection of Industrial Property or one Member of the World Trade Organization for which that earlier application was filed (Rule 4.10(b)(ii)): . . . .

**Box No. VII INTERNATIONAL SEARCHING AUTHORITY**

**Choice of International Searching Authority (ISA)** (if two or more International Searching Authorities are competent to carry out the international search, indicate the Authority chosen; the two-letter code may be used):

ISA / EP

**Request to use results of earlier search; reference to that search** (if an earlier search has been carried out by or requested from the International Searching Authority):

Date (day/month/year)

Number

Country (or regional Office)

**Box No. VIII DECLARATIONS**

The following **declarations** are contained in Boxes Nos. VIII (i) to (v) (mark the applicable check-boxes below and indicate in the right column the number of each type of declaration):

Number of  
declarations

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Box No. VIII (i)   | Declaration as to the identity of the inventor   | : |
| <input type="checkbox"/> Box No. VIII (ii)  | Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent             | : |
| <input type="checkbox"/> Box No. VIII (iii) | Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application | : |
| <input type="checkbox"/> Box No. VIII (iv)  | Declaration of inventorship (only for the purposes of the designation of the United States of America)                               | : |
| <input type="checkbox"/> Box No. VIII (v)   | Declaration as to non-prejudicial disclosures or exceptions to lack of novelty   | : |

Box No. IX CHECK LIST; LANGUAGE OF FILING		
<p>This international application contains:</p> <p>(a) <b>in paper form</b>, the following number of sheets :</p> <p style="margin-left: 20px;">request (including declaration sheets) : 5</p> <p style="margin-left: 20px;">description (excluding sequence listings and/or tables related thereto) : 10</p> <p style="margin-left: 20px;">claims : 6</p> <p style="margin-left: 20px;">abstract : 1</p> <p style="margin-left: 20px;">drawings : 4</p> <p style="margin-left: 20px;">Sub-total number of sheets : 26</p> <p style="margin-left: 20px;">sequence listings : </p> <p style="margin-left: 20px;">tables related thereto : </p> <p style="margin-left: 20px;"><i>(for both, actual number of sheets if filed in paper form, whether or not also filed in computer readable form; see (c) below)</i></p> <p style="margin-left: 20px;">Total number of sheets : 26</p> <p>(b) <input type="checkbox"/> <b>only in computer readable form</b> (Section 801(a)(i))</p> <p style="margin-left: 20px;">(i) <input type="checkbox"/> sequence listings</p> <p style="margin-left: 20px;">(ii) <input type="checkbox"/> tables related thereto</p> <p>(c) <input type="checkbox"/> <b>also in computer readable form</b> (Section 801(a)(ii))</p> <p style="margin-left: 20px;">(i) <input type="checkbox"/> sequence listings</p> <p style="margin-left: 20px;">(ii) <input type="checkbox"/> tables related thereto</p> <p>Type and number of carriers (diskette, CD-ROM, CD-R or other) on which are contained the</p> <p style="margin-left: 20px;"><input type="checkbox"/> sequence listings: .....</p> <p style="margin-left: 20px;"><input type="checkbox"/> tables related thereto: .....</p> <p style="margin-left: 20px;"><i>(additional copies to be indicated under items 9(ii) and/or 10(ii), in right column)</i></p>	<p>This international application is accompanied by the following item(s) (mark the applicable check-boxes below and indicate in right column the number of each item):</p> <p>1. <input checked="" type="checkbox"/> fee calculation sheet : 1</p> <p>2. <input type="checkbox"/> original separate power of attorney : </p> <p>3. <input type="checkbox"/> original general power of attorney : </p> <p>4. <input checked="" type="checkbox"/> copy of general power of attorney; reference number, if any: ..... : 1</p> <p>5. <input type="checkbox"/> statement explaining lack of signature : </p> <p>6. <input type="checkbox"/> priority document(s) identified in Box No. VI as item(s): ..... : </p> <p>7. <input type="checkbox"/> translation of international application into (language): ..... : </p> <p>8. <input type="checkbox"/> separate indications concerning deposited microorganism or other biological material : </p> <p>9. <input type="checkbox"/> sequence listings in computer readable form (indicate type and number of carriers)</p> <p style="margin-left: 20px;">(i) <input type="checkbox"/> copy submitted for the purposes of international search under Rule 13ter only (and not as part of the international application) : </p> <p style="margin-left: 20px;">(ii) <input type="checkbox"/> (only where check-box (b)(i) or (c)(i) is marked in left column) additional copies including, where applicable, the copy for the purposes of international search under Rule 13ter : </p> <p style="margin-left: 20px;">(iii) <input type="checkbox"/> together with relevant statement as to the identity of the copy or copies with the sequence listings mentioned in left column : </p> <p>10. <input type="checkbox"/> tables in computer readable form related to sequence listings (indicate type and number of carriers)</p> <p style="margin-left: 20px;">(i) <input type="checkbox"/> copy submitted for the purposes of international search under Section 802(b-quater) only (and not as part of the international application) : </p> <p style="margin-left: 20px;">(ii) <input type="checkbox"/> (only where check-box (b)(ii) or (c)(ii) is marked in left column) additional copies including, where applicable, the copy for the purposes of international search under Section 802(b-quater) : </p> <p style="margin-left: 20px;">(iii) <input type="checkbox"/> together with relevant statement as to the identity of the copy or copies with the tables mentioned in left column : </p> <p>11. <input checked="" type="checkbox"/> other (specify): cover letter ..... : 1</p>	Number of items
<p>Figure of the drawings which should accompany the abstract: 1</p>	<p>Language of filing of the international application: English</p>	
<p><b>Box No. X SIGNATURE OF APPLICANT, AGENT OR COMMON REPRESENTATIVE</b></p> <p><i>Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the request).</i></p> <div style="border: 1px solid black; height: 60px; margin-top: 10px; display: flex; align-items: center; justify-content: center;"> <p style="font-size: 1.2em;">Mark Charles FOSTER</p> </div>		

For receiving Office use only	
<p>1. Date of actual receipt of the purported international application: .....</p>	<p>2. Drawings:</p> <p><input type="checkbox"/> received:</p> <p><input type="checkbox"/> not received:</p>
<p>3. Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application: .....</p>	
<p>4. Date of timely receipt of the required corrections under PCT Article 11(2): .....</p>	
<p>5. International Searching Authority (if two or more are competent): ISA /</p>	
<p>6. <input type="checkbox"/> Transmittal of search copy delayed until search fee is paid</p>	
For International Bureau use only	
<p>Date of receipt of the record copy by the International Bureau: .....</p>	

## PATENT COOPERATION TREATY

PCT

NOTIFICATION OF THE RECORDING  
OF A CHANGE(PCT Rule 92bis.1 and  
Administrative Instructions, Section 422)

From the INTERNATIONAL BUREAU

To:

MATHISEN & MACARA  
The Coach House  
6-8 Swakeleys Road  
Ickenham  
Uxbridge UB10 8BZ  
United Kingdom

Date of mailing (day/month/year) 06 August 2003 (06.08.03)	<b>IMPORTANT NOTIFICATION</b>
Applicant's or agent's file reference 6/WW32609WO	
International application No. PCT/GB03/01394	International filing date (day/month/year) 28 March 2003 (28.03.03)

## 1. The following indications appeared on record concerning:

☒ the applicant      ☐ the inventor      ☐ the agent      ☐ the common representative

## Name and Address

KIDDE PLC  
Mathisen Way  
Colnbrook  
Slough  
Berkshire SL3 0HB  
United Kingdom

State of Nationality  
GB

State of Residence  
GB

Telephone No.

Facsimile No.

Teleprinter No.

## 2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

☒ the person      ☒ the name      ☐ the address      ☐ the nationality      ☐ the residence

## Name and Address

KIDDE IP HOLDINGS LIMITED  
Mathisen Way  
Colnbrook  
Slough SL3 0HB  
United Kingdom

State of Nationality  
GB

State of Residence  
GB

Telephone No.

Facsimile No.

Teleprinter No.

## 3. Further observations, if necessary:

## 4. A copy of this notification has been sent to:

☒ the receiving Office      ☐ the designated Offices concerned  
☒ the International Searching Authority      ☐ the elected Offices concerned  
☐ the International Preliminary Examining Authority      ☐ other:

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Facsimile No. (41-22) 338.89.65

Authorized officer

Abderrezak SMAHI

Telephone No. (41-22) 338 8021

005789898